

# TV AS A CREATIVE MEDIUM

## HOWARD WISE AND VIDEO ART

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[Ed.'s note: This is the third and final article in a series, funded by a grant from the New York State Council on the Arts Media Program, on individuals who have been important in the exhibition, distribution, and expansion of video art and community video. The first article, "The Whitney Museum and the Shaping of Video Art: An Interview with John Hanhardt," appeared in *Afterimage*, May 1983. The second article, "An Interview with George Stoney," appeared in *Afterimage*, January 1984.]

Ever since Marshall McLuhan has become a household name, people have become aware of the tremendous force, both actual and potential, that TV is having and will have on their lives.

The machine is obsolescent. Magazines, books, newspapers and other publications making use of the written word as we have known it are threatened. The relationships of nations, classes, generations and individuals are deeply affected. Education will be revolutionized, schools transformed if not eliminated (why interrupt your child's education by sending him to school?). TV is at the cause, or at least at the root of the cause, of all of these changes that are transforming our civilization.

Why has not art been affected by this pervading influence? Perhaps quite simply because, up until now the time was not right. Perhaps it had to await the maturing of the generation who were in their sub-teens in the 1950's, those who were "brought up" on TV. . . . As in every generation, some were artists. These have been at work for two, three, five and even more years, scrounging around second hand shops for parts, working with TV because they were fascinated by the results they were able to achieve, and because they sensed the potential of TV as the medium for their expression.<sup>1</sup>

—Howard Wise

Howard Wise is one of the people who is responsible for the idea of an alternative television.<sup>2</sup>

—Frank Gillette

"TV as a Creative Medium" was a catalytic event around which a video art community began to coalesce. New names and faces had appeared on the scene every year since 1965, but until the Spring of '69 there had been no center, no real cohesion, no sense of a community of purpose. After the show at the Howard Wise Gallery, it was possible to identify oneself as a video artist, and to recognize other video artists.<sup>3</sup>

—Davidson Gigliotti

The shape and direction of video art's accelerated growth, since virtual nonexistence in the mid-'60s up to the present, has been influenced primarily by the priorities of major funders—the New York State Council on the Arts, the Rockefeller Foundation, the National Endowment for the Arts, among others. It has matured without the bevy of individual collectors who support more established forms such as painting and sculpture. Within video's media arts centers and funding organizations, there are many advocates, administrators, and curators who provide an infrastructure which enables artists to produce and distribute work, often doing so with little publicity or recognition. In this realm, Howard Wise stands out as an individual benefactor who preceded and has supplemented private foundations and public monies. He has been a central figure in the visibility, production, and acceptance of video art. For almost 20 years, he has been one of the few patrons of video art.

On May 17, 1969, a show which was to become the seminal exhibition of video art in the U.S. opened at the Howard Wise Gallery in New York City. That exhibition, "TV as a Creative Medium," effectively pointed to the diverse potential of a new art form and social tool. Subsequently, the show became renowned for the inspiration it provided for many artists and future advocates of video. The artists represented in the show, a few of whom are still involved in the medium today, came from varied backgrounds—painting, filmmaking, nuclear physics, avant-garde music and performance, kinetic and light sculpture—and their approaches presented a primer of the directions which video would soon take. Theoretically, they variously saw video as viewer participation, a spiritual and meditative experience, a mirror, an electronic palette, a kinetic sculpture, or a cultural machine to be deconstructed. Ripe with ideas and armed with a heady optimism about the future of communications, these artists used video as an information tool and as a means of gaining understanding and control of television, not solely as an art form. In "TV as a Creative Medium" alternative television was presented as a stepping stone to the promised communications utopia.

Despite such non-aesthetic concerns among first generation videomakers, the exhibition signaled the emergence of a definition of video as an art medium. By 1969, Wise had established himself as a central figure in what has come to be known as the "art and technology" movement. His 57th St. gallery was one of the main showcases for kinetic and light sculpture, and initially Wise looked upon video as a kind of light work, an extension of kineticism. In 1969 he wrote, "Most Americans already have potential kinetic art right in their own living rooms: Television is kinetic art—it needs only to be 'or-

dered' by an artist."<sup>4</sup> Wise's step into electronic art, however, was an irreversible one. Within a year and a half after "TV as a Creative Medium" he closed his gallery and began plans for an organization designed to foster the work of video artists and their use of new technologies. That organization eventually became known as Electronic Arts Intermix (EAI).

Howard is a gentleman, which is rare in the art world. To appreciate him you have to be a little old-fashioned. He is the product of another and slightly more gracious age.<sup>5</sup>

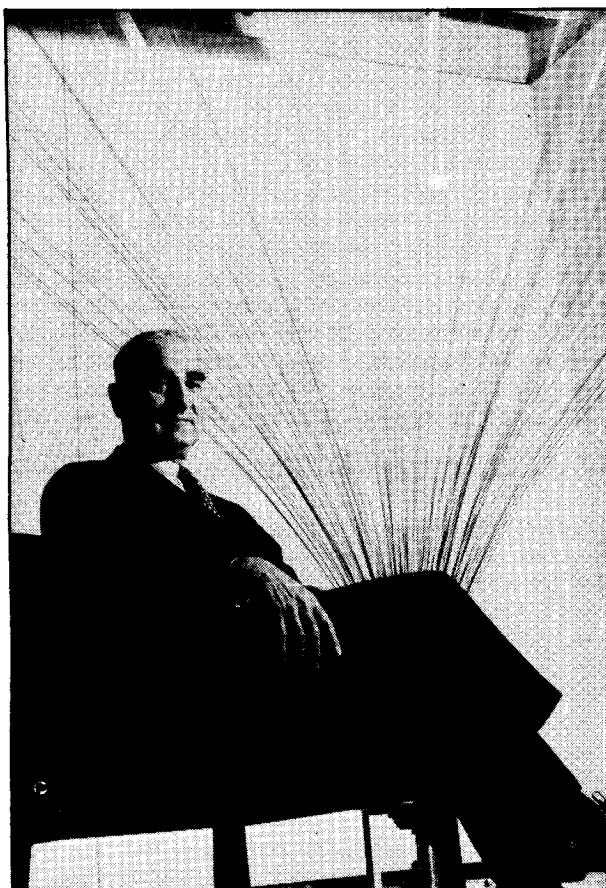
—Davidson Gigliotti

Howard was very important because he went against the mainstream in his gallery.<sup>6</sup>

—Willoughby Sharp

Howard was lucky to be born in the best time of American capitalism. He is a perfect balance of money and aesthetic.<sup>7</sup>

—Nam June Paik



Howard Wise with *Stainless Steel Fountain*, by Len Lye. Photograph by Mottk Weissman.

Howard Wise was born on Nov. 6, 1903, in Cleveland, Ohio. He went to Europe for five years in the '20s, studied art at the Louvre and the Sorbonne and French, history, and constitutional law at Cambridge University in England.<sup>8</sup> Upon his return to Cleveland, Wise went to work for his family's firm, the Arco Company, which manufactured industrial coatings. He successfully ran the company for 25 years, substantially expanding the business.

My father resigned during the Depression, so I had that responsibility at an early age. Like any other business, the Depression had hurt us a lot and we had a lot of labor unrest among the 300-400 employees. I decided that I had better take a good look at the situation, and I got in touch with a labor consultant. He suggested that since we were a relatively small business we could keep an intimate relationship with the employees, so I did that. We had 10-year and 25-year clubs, and when it came my turn to get the gold insignia, or whatever it was, for my 25 years with the company I realized, "My God, 25 years," and I decided to quit.<sup>9</sup>

Wise sold the company and renewed his interest in painting:

I thought I would combine my artistic experience with my business experience and start a gallery in Cleveland because there really was no gallery of any stature there. I felt that Cleveland was artistically a very closed and ingrown community. The only real modern work that was shown was local work. My objective in opening a gallery in Cleveland was to bring the art from various centers in Europe and America.

In 1957 Wise founded the Howard Wise Gallery of Present Day Painting and Sculpture. For several years he exhibited contemporary painting and sculpture from several European galleries and selections from larger shows at established institutions, such as "8 Painters of the Galerie Arnaud, Paris," "18 Painters of the 1958 Pittsburgh International," and "Selections from the 1958-59 Whitney Annual." The Cleveland gallery operated for five to six years, and, while still running it, Wise opened the Howard Wise Gallery on the second floor at 50 W. 57th St. in early 1960.<sup>10</sup>

It is hard to imagine how different the art world in New York was in the early '60s compared to today. With many fewer

galleries, any newly established showcase received a significant amount of attention. Wise began operations on 57th St. only three years after Leo Castelli opened his first gallery on 77th St. Soho was still an industrial district, and the bulk of important galleries were on Madison Ave. and E. 57th St. Beyond these commercial, uptown galleries, there existed only a few on 10th St.; several artist cooperatives and small, noncommercial galleries operated and coordinated efforts comprising an alternative exhibition scene similar to the galleries on the Lower East Side today. In 1960 the zenith of Abstract Expressionism was past, and the art world was slowly beginning to decentralize into diverse movements. Frank Gillette describes the arrival of Howard Wise in the art community as signifying "the antithesis of 10th St. Howard was, at first, like a pariah uptown. He was very midwestern and his gallery had wall-to-wall carpeting."

Wise inaugurated his New York gallery by showing Expressionist paintings, including work by Milton Resnick and George McNeil, and for about a year and a half, Wise commuted between Cleveland and New York. In January 1961 he presented an exhibit of three kinetic artists—Yaacov Agam, Len Lye, and Jean Tinguely—in the Cleveland gallery, with the title of "Movement in Art." Coincidentally and almost simultaneously (although unbeknown to Wise until it opened), Amsterdam's Stedelijk Museum held a major survey of 72 artists working in kinetic sculpture, organized by Pontus Hultén, called "Art in Motion," of which Tinguely's work was the centerpiece.<sup>11</sup> Like video artists in the early 1970s, artists working with kinetic and light sculpture articulated early '60s optimism: the future of art was proclaimed as an alliance between artistic and technical concerns; the machine was paramount.

Kinetic and light sculpture represent two distinct yet overlapping movements, because, quite simply, most light work is inherently kinetic. The genesis of kinetic work can be traced to the '20s when Bauhaus artist László Moholy-Nagy and U.S. artist Thomas Wilfred began exploring the artistic potential of light. Moholy-Nagy built his *Light-Space Modulator* between 1922 and 1930. It is a complex piece comprised of various light bulbs and reflective and filtering surfaces, which was rebuilt in the 1960s—and exhibited in 1970 at Howard Wise Gallery. Wilfred is considered by many to be the U.S. pioneer of light sculpture, or what he termed "Lumia." Wilfred built a *Clavilux* in the early 1920s, which was described by Howard Wise Gallery as "an organ-like instrument of sliding keys controlling optical elements (lenses, color filters, mirrors, prisms and projectors)" which produced images on a theater-sized screen. Soon after, Wilfred designed a self-contained, automatically operated *Clavilux* on which he exhibited new compositions. In many ways, the roots of kinetic sculpture date to 1913 when Marcel Duchamp put a bicycle wheel on a stool and named it *Bicycle Wheel*, and Alexander Calder began constructing his famed mobiles in the '30s.

In the late 1950s and early '60s, kinetic and light works began to reemerge. Both Wise and Douglas MacAgy, an art historian and curator who worked with Wise when he began to explore these new media, as well as others involved in this movement, saw light sculpture as an extension of Impressionism—a movement which took light as its subject matter—and kineticism as an outgrowth of Futurism, which attempted to depict motion on canvas. In Europe, kinetic and light works were produced by several art collectives such as Group Zero in Dusseldorf, the Groupe de Recherche d'Art Visuel (of which Julio Le Parc was a member) in Paris, and encouraged by establishments such as the Denise René Gallery in Paris, which held an important early exhibition called "Le Mouvement" in 1955. Swiss artist Jean Tinguely received a great deal of attention with his notorious self-destructing sculpture-event "Homage to New York" at the Museum of Modern Art in 1960, but most kinetic artists were less heralded at the time.

The renewed interest in artistic machines in the early 1960s can be attributed to the proliferation and sophistication of available hardware as well as a renewed fascination with technology. With characteristic aplomb, Wise defined this emergence as also attributable to a specific Manhattan phenomenon:

Two circumstances enabled the artist to use actual natural phenomena in his work, making kinetic light art possible. The first was the development of devices by modern technology that permit the control, transmission, and transformation of energy. Among these are small, geared electric motors; high-intensity light bulbs; proximity switches; polarized light analyzers; diodes; transistors and other miniaturized components. The second was the existence in New York of Canal Street and its many little shops where surplus electronic components, plastics, motors, etc. are plentifully available at far below original costs.<sup>12</sup>

Eventually, the Howard Wise Gallery became a central exhibition space for artists who worked in light, motion, and sound. After several years, Wise made a clear break with painting when he presented "On the Move," in his words, "the first U.S. survey exhibition of contemporary kinetic art" in 1964. The show included many artists who emerged as important figures in the medium: Agam, Calder, Ivan Cher-

mayeff, Le Parc, George Rickey, Takis, and Tinguely. Later that year Wise exhibited the core members of Group Zero which included Heinz Mack, Otto Piene (now director of the Center for Advanced Visual Studies at the Massachusetts Institute of Technology), and Gunther Uecker.<sup>13</sup> Willoughby Sharp, who was involved in the growth of what he terms "kineticism," describes Group Zero as "the first artist collective concerned with movement after the Second World War . . . Zero quickly arrived at an esthetic sensibility devoted to expressing dynamic, organic relationships through concrete, objective means. . . ." <sup>14</sup> In the Wise Gallery show, Piene exhibited paintings produced with oil paint and smoke; Mack showed kinetic light pieces using aluminum, mirrors, and water; Uecker presented kinetic sculptures comprised of white canvas and nails.

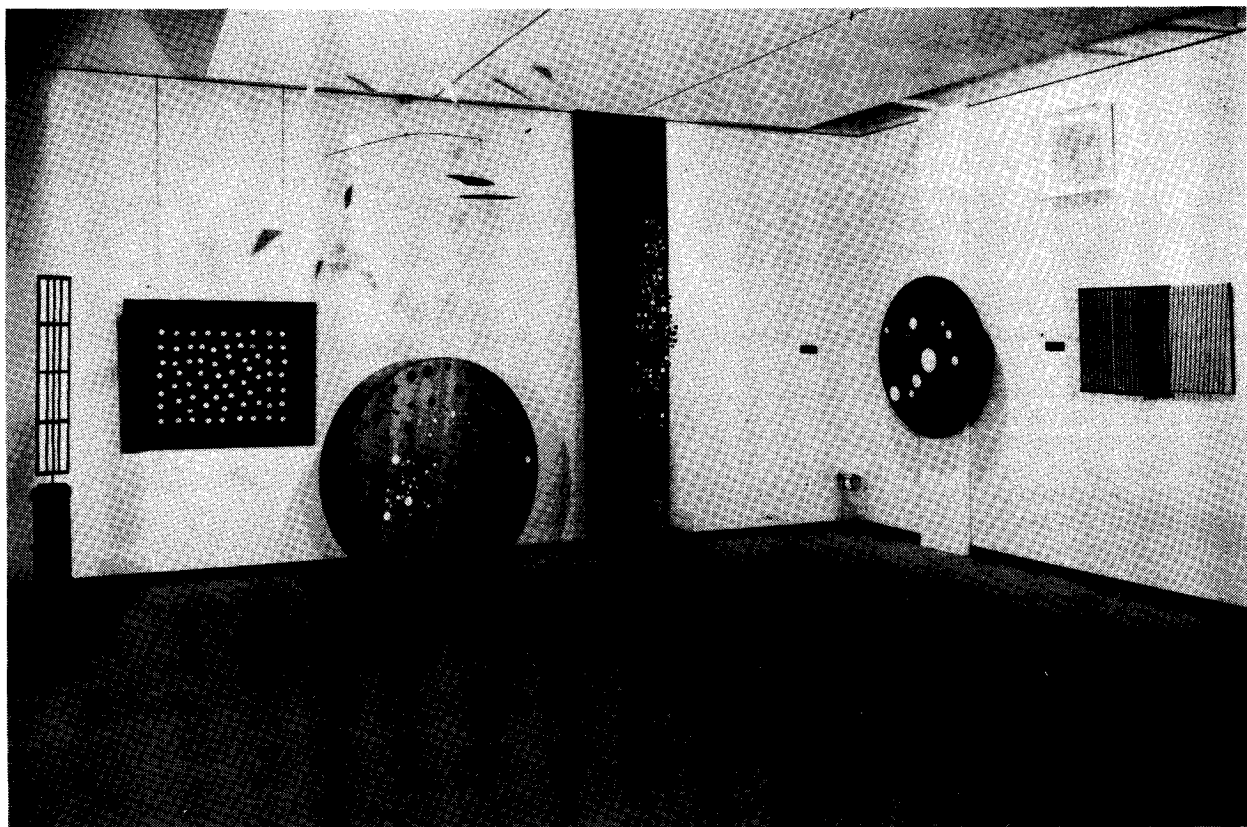
A number of artists associated with the Howard Wise Gallery could be identified as a central group in the art and technology movement: Wen-Ying Tsai, whose "Cybernetic Sculpture" consisted of graceful steel rods or polished metal plates which vibrated according to the viewer's proximity, sound, or an eternal light; Le Parc, who caused a stir in 1966 by winning the Grand Prix at the Venice Biennale shortly after Wise gave him a large show<sup>15</sup>; Lye, who was well-known for his abstract animated films as well as his kinetic sculpture; and Howard Jones, a light and sound sculptor. In February 1967 the gallery exhibited "Lights in Orbit," a popular survey of light work which included work by Jones, Le Parc, Mack, Piene, Takis, Uecker, USCO, and Wilfred, as well as several artists who soon after began experimentations with television: Jackie Cassen, Rudi Stern, Earl Reiback, Thomas Tadlock, and Nam June Paik, who had been working with television since 1963. David Shirley wrote in *Newsweek*,

The Howard Wise Gallery . . . usually serene, is pulsating, flashing, glowing and vibrating these days like the movies' old dream of the mad scientist's laboratory. Strobe lights rake the walls and rotating gel wheels filter gigantic spots in all directions. Sporadically, laser beams, polarized light and polyester films flash projections of weird color patterns. Said one visitor, as he blinked his way out of the gallery: "It was like being inside a kaleidoscope."<sup>16</sup>

"Lights in Orbit" and other survey exhibitions Wise sponsored sustained and reinforced these art movements, placing the work in contexts which helped viewers understand these media. Certain museums started to pay attention to light and kinetic sculpture, and an expanded version of "Lights in Orbit," entitled "Light/Motion/Space," was exhibited later in 1967 at the Walker Art Center in Minneapolis and at the Milwaukee Art Center. In December 1967, Wise opened his last extensive group show of light sculpture, "Festival of Lights," in which Paik, Serge Boutourline, and Aldo Tambellini exhibited sculptures incorporating television sets.<sup>17</sup> In his review of "Festival of Lights" in the *New York Times*, Hilton Kramer represented one prevalent critical reaction to kinetic sculpture:

In this particular artistic mode it is machines rather than the artists who have artistic identities. In the darkened gallery we see numerous color-television images tracing a great variety of abstract patterns, and there are constructions of many kinds that reflect, manipulate and project light in predictably unpredictable ways. A great deal of invention and ingenuity has clearly been invested in these works, and as a gallery ensemble they are fun to look at—for a few minutes.<sup>18</sup>

In many ways, Howard Wise was an anomaly in the 1960s New York art world. He did not promote art with the intention of making money; he had already acquired his fortune. Running a gallery for his personal interest and enjoyment, which he supported in part by taking no personal salary, Wise could be described as a patron who could afford to support work which experimented with new technologies, work which ignored current aesthetic fashions. Nam June Paik recalls that when he came to New York in the early '60s, he was told that the Howard Wise Gallery "is a very good gallery that never



Installation view of "On the Move" (1964). The show was the first U.S. survey exhibition of contemporary kinetic art. Photograph by Geoffrey Clements. This and all installation views from the Howard Wise Gallery.

sells." He characterizes the gallery as an exception to the norm: "Howard was different. He was generous." However, Howard Wise Gallery did sell; in fact, it sold Paik's first piece, *Participation TV* in 1969 to David Bermant, which was the only piece Paik sold for some time thereafter. Wise's best customers were J. Patrick Lannan, a collector from Palm Beach, Fla.; Malcolm Forbes, the owner of *Forbes* magazine, who has a large underground gallery filled with kinetic and light sculpture at his estate in Far Hills, N.J.;<sup>19</sup> and Bermant, an owner of shopping malls who still collects and commissions art using technology. Bermant describes Wise as "an eminently fair gallery dealer,"<sup>20</sup> and recalls that when he first began buying sculpture to exhibit in his shopping centers, the Wise Gallery was the most important source. According to Bermant, Wise's prices were reasonable, charging anywhere from \$2,000 to \$6,000.

Some of Wise's reasons for choosing a career as a gallery owner are revealed in various announcements for the gallery; they are playful, eccentric, and personal compared to the usual PR fare. The announcement for a 1965 exhibition of computer-generated pictures by Bela Julesz and Michael Noll consisted of four computer cards. The press release for "Summer Lights" in 1968 begins, "Rarely, but nevertheless now and then, because one does not expect too much, one is pleasantly surprised." In another 1968 release, after a quote from "Ecclesiastes," "But time and chance happeneth to them all," Wise wrote,

A season's program hangs on the Ecclesiastical 'but.' In months ahead time and perhaps chance are bringing light to the Wise Gallery. It was perhaps by chance that many artists on several continents are choosing this time to reintroduce light as a dominant formal component after the long lapse since Impressionism.

Wise's genuine interest in new technologies soon led him to electronics, and in early 1969 he began to explore artists'

television. By 1969, video was gaining a furious if somewhat limited momentum as more artists began to use portapak. In New York a small interconnected group exchanged ideas and equipment: Paul Ryan, a research assistant with Marshall McLuhan at Fordham University, lent Fordham's equipment to Frank Gillette, a painter; filmmaker Ira Schneider met Gillette at a party and later taught a video workshop at Antioch College with Gillette. At that time Eric Siegel was working alone, experimenting with television hardware, and Les Levine, Tambellini, and Paik had begun exhibiting video work.

The younger generation has rebelled against its elders in the home. It has stormed the campuses. About the only target remaining *in loco parentis* is that preoccupied of youth, television. Last week the television generation struck there too, but the rebellion was half in fun . . . Within the confines of two rooms, 25 TV sets glare and blare at one another. The ten artists, all in their 20s or 30s, are sculptors from the Kinetic School, research protégés of Marshall McLuhan or electronics experimenters, united by disgust with usual TV fare.<sup>21</sup>

—Michael Shenberg  
*Time*, May 30, 1969

The Moorman-Paik collaboration is obviously the show-stopper of this quite dazzling exhibition in which artists . . . offer their own TV fare, most of it far more engaging than anything the TV camera records.

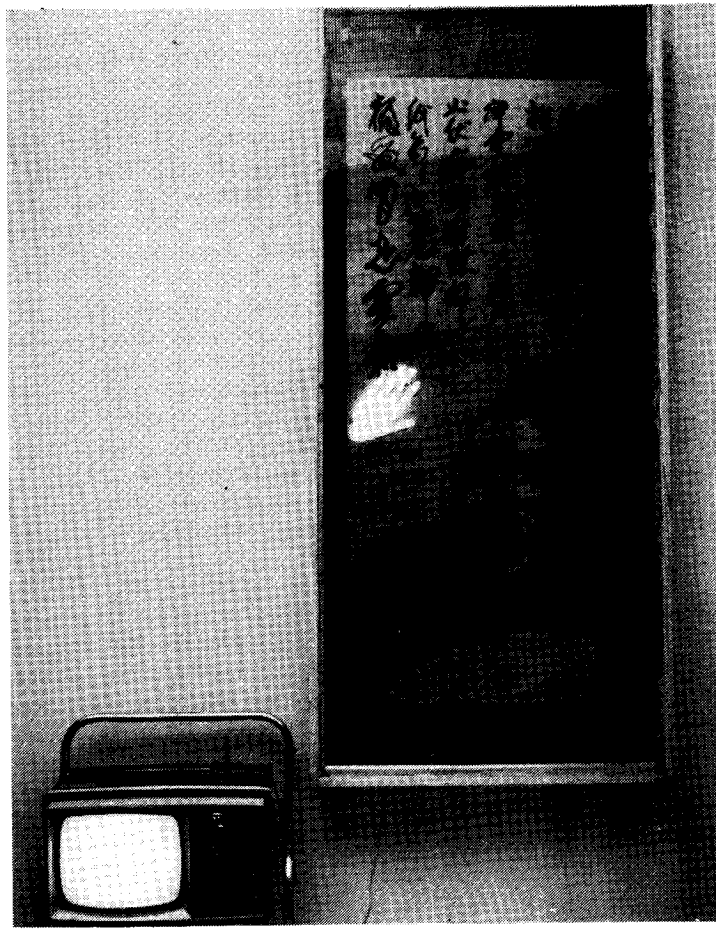
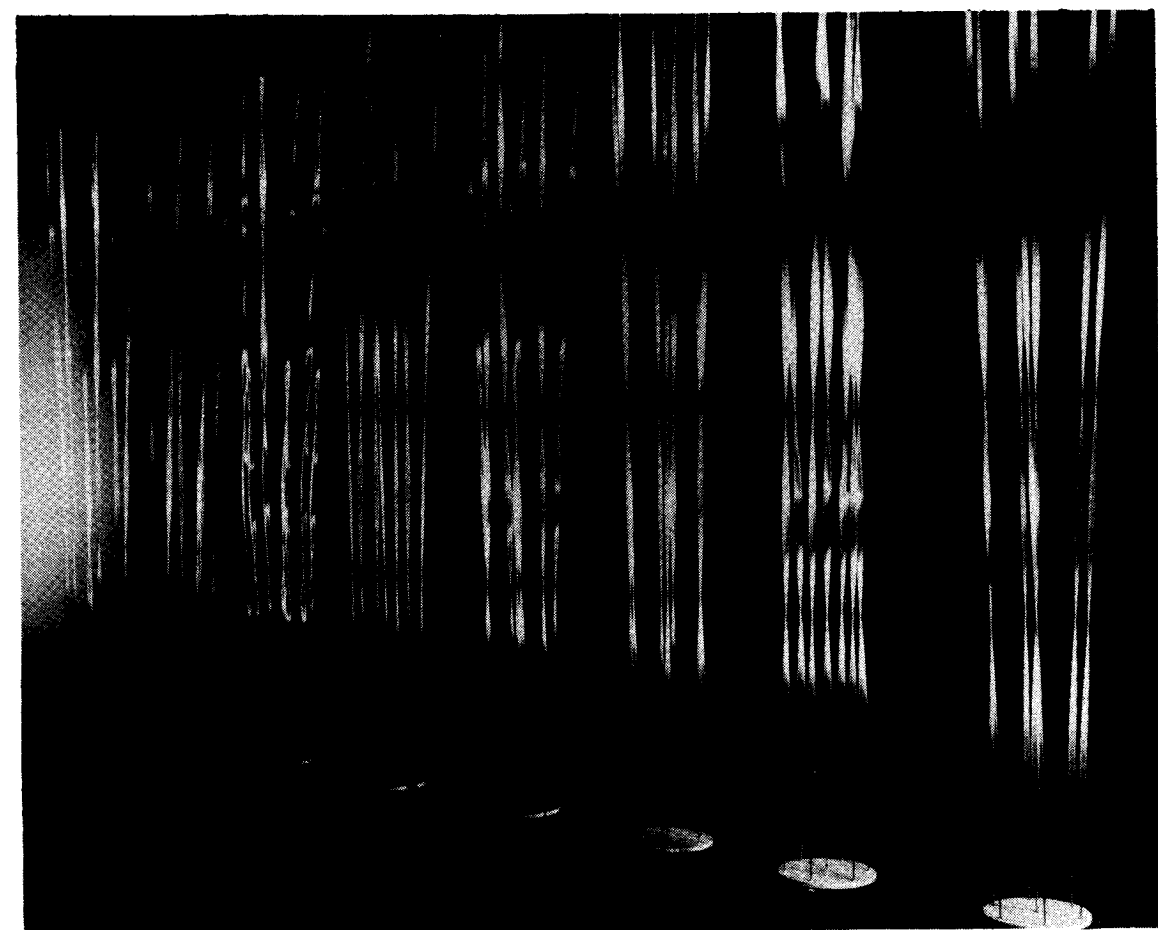
—John Gruen  
*New York*, June 9, 1969

I think it can be said without too much doubt that this exhibit is as important to the use of the medium as an aesthetic expansion as the 1913 Armory Exhibit was to modern painting and sculpture.

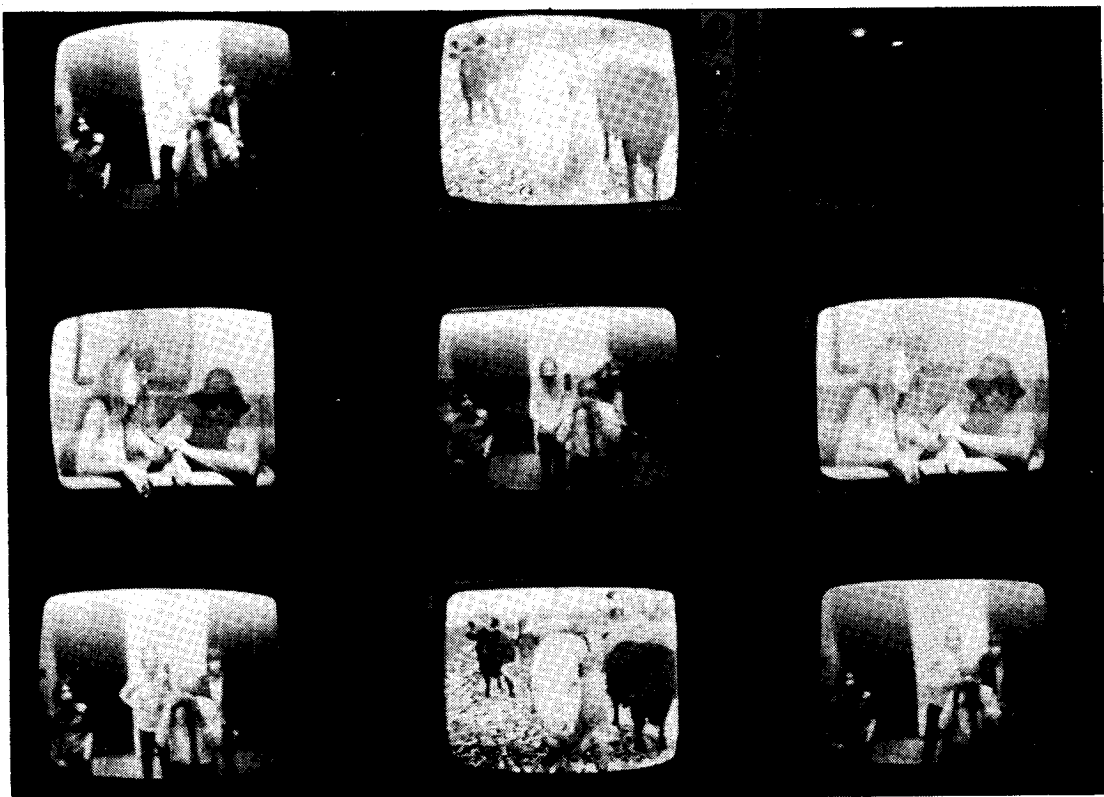
—Joseph Schwartz  
*The Jersey Journal*, June 12, 1969

While the point of "TV as a Creative Medium" is to humanize technology, the technology remains the problem. The total effect of the

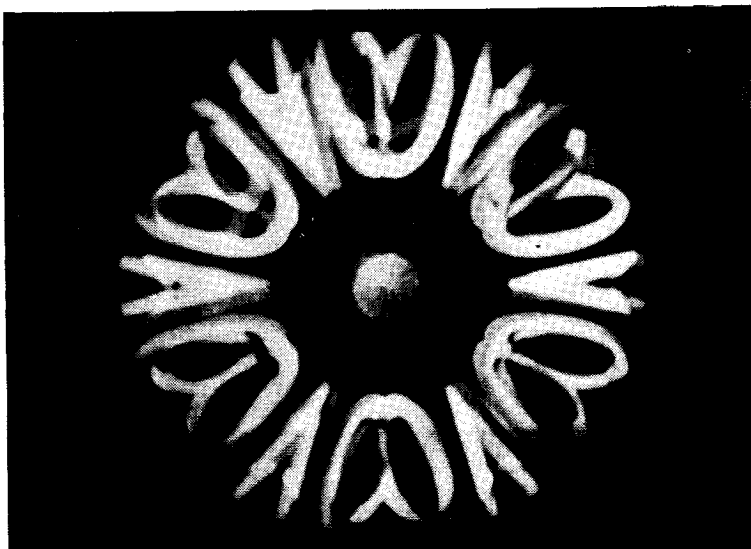
Left: installation view of *Cybernetic Sculpture* (1968), by Wen-Ying Tsai. The steel rods and polished metal plates vibrated according to the viewer's proximity, sound, or an eternal light. Photograph by Eric Pollitzer. Right: installation view of *Electronic Zen Tri-Color Moon* (1967), by Nam June Paik. From "Festival of Lights" (1967), a group show of light and sculpture. Photograph by Bernard Gotfryd.







Left: Installation view of *Wipe Cycle* (1969), by Frank Gillette and Ira Schneider. Live images of viewers were intercut with broadcast images: at periodic intervals the screens were wiped blank. Photograph by Howard Wise. Top right: frame from *Archetron* (1968), by Thomas Tadlock. A large console consisting of three monitors and an elaborate system of mirrors and filters created kaleidoscopic imagery from broadcast TV. Bottom right: frame from *Einstein* (1968), a manipulated image sequence of Albert Einstein's face, by Eric Siegel. All from "TV as a Creative Medium."



show—the "participation television" contributions notwithstanding—is off-putting. It is, from one point of view at least, a collection of technical details waiting for a unifying aesthetic genius.

—Stephanie Harrington  
*The Village Voice*, May 29, 1969

In 1968 Siegel had shown his videotape *Psychedelelevision* at Channel One, a video theater in New York City. He remembers that Tadlock told Wise about his work, and the gallery owner came to see it. He showed Wise several pieces, "but only the Einstein piece really turned him on."<sup>22</sup> Wise asked Siegel if he could do the same piece in color, and gave him \$200 to buy a color TV set to build it. Like Siegel, many of the artists in "TV as a Creative Medium" were surprised when Wise paid them to complete their projects included in his show. For some, it was the first time that anyone had paid them for their work.

The work in "TV as a Creative Medium" may have appeared to a casual observer as electronic versions of light sculpture, but, in fact, the show represented a broad range of ideas and approaches. Siegel, for instance, "was struck by the fact that every individual was doing something different from the next—there were no similarities." In retrospect, the exhibition was important not only as a first, but also as prototypical of much video made in the following years.

The centerpiece of "TV as a Creative Medium" was *Wipe Cycle*, by Gillette and Schneider, which greeted viewers upon their entry into the gallery from the elevator. The piece consisted of a grid of nine monitors; a camera hidden amid the monitors fed a live image to the center screen. This image was switched to the outer monitors in eight- and 16-second intervals so that at any given time the viewers could see themselves eight or 16 seconds before. These live images intercut with broadcast images, and at periodic intervals the screens were wiped blank. *Wipe Cycle* was one of the first

video installations to involve the viewer in an active role on the screen;<sup>23</sup> it provided an element of surprise and its correlation between the viewer's image and broadcast imagery emphasized the individual's relationship to information. Gillette described the piece as

a television mural designed to engage and integrate the viewer's television "image" at three separate points in time and five exchanging points in space... The intent of this overloading (something like a play within a play within a play) is to escape the automatic "information" experience of commercial television without totally divesting it of its usual content.<sup>24</sup>

*Wipe Cycle* remains a complex and intriguing work. As critic Richard Kostelanetz wrote, "The spectator feels caught in an intelligent, watchful, oblivious system whose incessant and variable observations remain compelling and mysterious even after their operation is explained."<sup>25</sup>

Another outstanding work in the exhibition was Paik's *TV Bra for Living Sculpture*, an ongoing performance by avant-garde cellist Charlotte Moorman. Wise had followed the work of Moorman and Paik for several years. When the duo was arrested in 1967 at the Film-Maker's Cinematheque during a performance of Paik's *Opera Sextronique*,<sup>26</sup> Wise allowed Moorman to conduct a press conference in his gallery, providing her with the respectable background of the 57th St. art establishment as she stated her case. In "TV as a Creative Medium" Paik premiered both *Participation TV*, and *TV Bra* (Moorman still performs the latter). "We were all surprised by the response to that piece," she says, "it is so popular."<sup>27</sup> In *TV Bra*, Moorman wears two small TV sets on her breasts while playing the cello. As she plays, her music alters the imagery on the monitors. *Participation TV* is an interactive piece with images of viewers generated in different colors on several monitors.

Installation view of *TV Bra for Living Sculpture* (1969), by Nam June Paik, performed by Charlotte Moorman. Wearing two small TV sets on her breasts while playing the cello, Moorman's music altered the imagery on the monitors. From "TV as a Creative Medium" (1969). Photograph by Tom McCarthy.



Many of the works in "TV as a Creative Medium" involved restructuring television sets. In John Serry's *TV Time Capsule* a TV set was cast in clear plastic so that its insides were made visible. The set played continuously, burning itself out twice during the show. Wrote Serry, "When the TV stops functioning the work is complete."<sup>28</sup> In *Three Experiments within the TV Tube*, Earl Reiback, a light sculpture protégé of Wilfred, whose background was nuclear engineering, painted the wall of a television tube with color phosphors. Viewers of his *Electron Beam* could manipulate an external magnet to effect the phosphors' movements. In *Suspension* and *Thrust* this technique was applied to broadcast television.

Other works dealt with the potential to incorporate art into commercial television and the consumer environment. *AC/TV (Audio-Controlled Television)*, by Joe Weintraub, was a device which translated "music into a complex kinetic image on the screen of any color TV."<sup>29</sup> Tadlock's *Archetron* presented a large console consisting of three monitors and an elaborate system of mirrors and filters to create kaleidoscopic imagery from broadcast TV. "It is not possible for this artist, (or any other using the Archetron)," wrote Wise in the exhibition brochure, "in effect to create simultaneously works of art on TV screens in countless homes." Boutourline's *Telediscretion* contained four television sets lined up on a wall, controlled by a switch which allowed viewers to choose among broadcast programs and a videotape by Boutourline and Wynn Chamberlain. The emphasis on the role of the viewer and the viewer's freedom to choose in all of these works indicates the hands-on, take-control-of-television attitude which informed much early video art.

Several other pieces in the show concentrated on abstract electronic imagery and image/sound relationships. *Black Spiral*, by Aldo Tambellini, was produced in collaboration with Bell Laboratories. It is a riveting videotape that filmmaker and critic Jud Yalkut has described as "a high-contrast spiraling white light, [which] shimmers, radiates, contracts, twists in orgasmic ecstasy, dwindles to nothing, and blazes forth again on the black video field."<sup>30</sup> Siegel's *Psychedelelevision in Color*<sup>31</sup> consisted of three tapes: *Einstein*, a manipulated image sequence of Albert Einstein's face, where his features radiate color and abstract imagery; *Symphony of the Planets*; and *Tomorrow Never Knows*, accompanied by the Beatles song. Both of the latter tapes display psychedelic imagery in conjunction with music, and Siegel jokingly refers to *Tomorrow Never Knows*, as "a kind of very early rock video." Today, however, this work looks like much more. Siegel's exploration of relationships between abstract imagery and sound entails sophistication not unlike that in the experimental films of Oskar Fischinger.

Completing the variety of work in "TV as a Creative Medium" was *Everyman's Möbius Strip*, by Paul Ryan (who, along with Gillette, was soon to become the theoretical mover in the video collective Raindance). Working with McLuhan, Ryan was exploring video as a psychological mirror, a social tool, and a communications device. Yalkut described Ryan's piece:

You are sitting in a curtained booth on a stool, a TV aperture hangs before you like a surrealistic picture frame, beyond which the portable video camera sits and observes, as you are prodded ever so gently by calculatedly stimulating questions: "React to the following people: Nixon, your mother, Eldridge Cleaver, Teddy Kennedy, you... for the next ten seconds, do what you want... now let your face be sad..." You watch yourself in full audio-picture recap of your "interview," erasing all but the fewest frames of the previous tape as your tape will be obliterated by the next.<sup>32</sup>

Ryan's intimate and confessional purposes portended videotapes of the 1970s, in which the artist directly speaks to the audience.

"TV as a Creative Medium" was extremely popular, and Wise extended it beyond the scheduled closing. But it was not a show that was universally lauded in the art press. One dis-

senter, critic Barbara Rose, wrote that the show was

an apt finale to the 1969 art season, in that it represented the pinnacle of pretension and the nadir of achievement, the exhibition managed to illustrate every current art-world cliché from "process art" . . . to the spurious concept of "spectator involvement" . . . Generally the level of imagination in these works was so low that the tube was merely treated as a kind of animated easel picture.<sup>33</sup>

Even if individual works were uneven, the overall impact remains uncontested. Stories of those who first saw the potential of video at Howard Wise Gallery in 1969 abound. As a writer for *Time* magazine, Michael Shambert reviewed the show. He was impressed by the work and immediately told Gillette that he wanted to work with him and Raindance, then in the formative stages as a profit-making corporation. Russell Connor, who was working at the Rose Art Museum at Brandeis University in Waltham, Mass. found the exhibit "staggering," and decided to try to show the work at his institution. The logistics of this move proved complicated, and many of the artists were interested in producing new pieces, so Connor assembled a new show which opened in January 1970, "Vision & Television."<sup>34</sup> (Within the year Connor went to direct NYSCA's newly established media program.) Like many other artists, Steina Vasulka was struck by the possibilities of video, and the show inspired her first work: "I went in there and saw *Einstein* blasting out, and it quite blew my mind."<sup>35</sup>

1969 was a pivotal year for video—as well as politics; the Wise show introduced the idea of exhibiting video art in a gallery and WGBH in Boston produced a series of videotapes, broadcast on March 23, *The Medium Is the Medium*. The artists involved overlapped with the group in the Wise show: Allan Kaprow, Paik, Pione, James Seawright, Tadlock, and Tambellini. As a result, serious consideration of video as art made its debut in the art press. Critic John Margolies wrote, "Television is clearly ready to be recognized as an educational device and an artistic means of great influence. Analogous to film, which was not considered an 'art' until it had been around for many years, television is finally receiving serious recognition."<sup>36</sup>

In 1969 and 1970, the Wise Gallery sponsored several shows which added to its reputation as influential and progressive: an exhibition of sculpture by Frederick Kiesler; a group show called "Kinesthetics" which included Lye, Juan Downey, and Carson Jeffries, among others; and the reconstructed *Light-Space Modulator*, by Moholy-Nagy. During the same period, Wise's concern about the Vietnam War grew. He incorporated these concerns into the gallery's structure, establishing an "information center" in the outer gallery which, according to a press release, would "be of interest to those who oppose our continued involvement in the Indochina War." There, information about anti-war groups, congressional primaries, and constitutional issues was available along with videotapes of current events such as demonstrations, shot by the Videofreex and Raindance collectives and edited by Ira Schneider.

Wise also sought new avenues of support for artists he considered to be at the frontier of new technologies. In particular, he regarded Siegel as the "whiz kid" of the small, energetic video community. After his participation in "TV as a Creative Medium," Siegel traveled to Sweden and began designing a video synthesizer. Upon his return to the U.S., he approached Wise with the idea and Wise "was skeptical but agreed to fund it," according to Siegel, who then went to San Francisco to build a prototype. He recalls, "I was one of the strongest instigators of the video movement, and I saw that as my role. Both Nam June Paik and I did a lot of promoting to Howard Wise of the idea that video was the next thing. . . . Later when I came back to New York [after completing the synthesizer] and there was no more Howard Wise Gallery, I was surprised and a bit guilty."

Upon Siegel's completion of the synthesizer in 1970, Wise and he differed on the question of how the device should be marketed. Wise wanted to license a manufacturer to build it. Siegel did not agree:

In retrospect, it was an unfortunate misunderstanding. I was a purist and didn't want television commercials to be made with the synthesizer. Howard thought commercial work would be okay. Looking back now, it would have been better, because at least the synthesizer would have been produced.

Siegel describes his relationship with Wise as symbiotic, and it was similar to the kind of partnership that Wise has established with many artists:

The attitude in those days was "We're all in this together doing our own thing," and when that overlapped we worked together. Howard could make use of the things I knew how to do, and in exchange he could provide exposure and funds, which I did not know how to get on my own.

In December 1970, Wise exhibited "Three Sounds," by Howard Jones, and decided it would be the final show in his gallery. In fact, it was the only show he ever sold out. As Wise remembers,

it was one piece, and one person bought it—Malcolm Forbes. It consisted of aluminum cases which were activated by various things—if you walked between the light source and the sensor of the piece, it would create a sound. There were different sensors all around the room, so you could play different tunes. It was quite a sight in the gallery to see people, in effect, dancing.

On December 15 Wise wrote a letter explaining his decision to close the gallery:

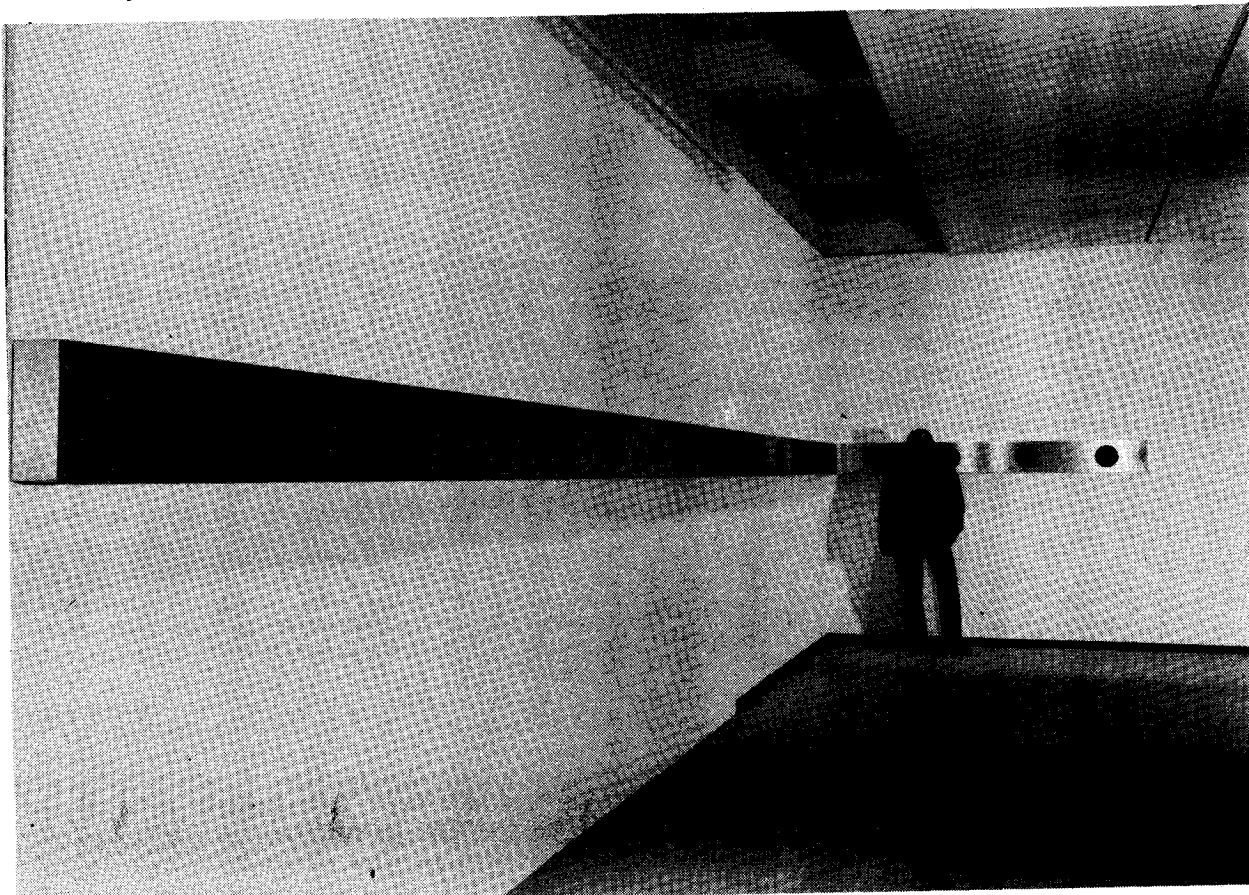
The most important considerations which have impelled me to make this decision are that many artists, among them some of the most adventuresome, are focusing their energies on works of such scope that these can only be hinted at in the Gallery, and cannot be shown or realized here. These artists are going out of the Gallery into the environment, the sky, the ocean, even into outer space. Others are seek-

ing imaginative ways of utilizing modern technology to humanize people instead of for commercial or destructive purposes, which dehumanize us all. . . .

I hope to contribute to the realization of some of these projects, particularly to those which are susceptible of diffusion over television.

Most important of all, I feel I must try to put to maximum social use whatever I possess in the way of training, ability and experience. . . . I cannot stand idly by when the existence of our society and ourselves as individuals is so darkly threatened. . . .

In perceiving the limitations of galleries, Wise was responding to changes in the presentation of art which occurred in the '60s. Many of his affiliated artists were involved in projects which, because of size and emphasis on environment, had to be shown in public spaces. For instance, Otto Piene began working with helium and creating large outdoor inflated sculpture. In 1967, five artists produced *Kinetic Environment* in Central Park which, according to Willoughby Sharp, "Tried to activate a quarter-mile cube of nature by using natural kinetic elements like air, fire, fog, ice, smell, smoke, and water."<sup>37</sup> Sharp concluded, "If one wants to characterize the present stage of the art of light and movement, one could say that due to the rapidly increasing awareness of



*Linear Relay* (1970), an aluminum electronic piece with 20 speakers and 1 sound, by Howard Jones. From "Three Sounds" (1970), the final exhibition at the Howard Wise Gallery.

past accomplishments there is a strong feeling of confidence in the ability of the new art to reconstruct the world kinetically." But in 1970 artists' interest in kinetic and light sculpture began to fade. Many of the same artists began making electronic art while others produced large outdoor pieces; few continued to create sculpture. The reasons for this are diverse. David Berman believes that the technology was still too cumbersome and unsophisticated to be effectively used in art, and that there was too little emphasis on how to maintain these works. For his part, Wise turned to electronic art, and his interest in video went beyond his curiosity about new technology; it was also political:

I wanted to do an anti-Vietnam War show in the late 1960s, and I chose the subject of the constitution. I always felt and still do that we really ought to teach our young people something about our rights and our constitutional heritage. I asked artists to submit ideas which I would then plan to help them get into video, but I got so little that seemed worthwhile. . . . You see, the reason I wanted to move in the direction of video was that I felt it could get a story across without making it propaganda. I thought the Vietnam War was an obscene thing, and you knew damn well when you were watching Nixon on television that he was lying through his teeth. That's one of the virtues of television. It does what artists have been trying to do for centuries. It gets inside the exterior of a person and lets you know what he is really thinking.

Howard made a serious effort to find a means of supporting that work. For me, it was important to have someone who said "do it." Howard was willing to see.<sup>38</sup>

—David Cort

Howard Wise's activities exemplify a unique sensitivity to, and understanding of, how artists are transforming our perception and understanding of art and technology. Howard is a visionary humanist, and at the basis of his activities is a profound concern for the potential of technology in the hands of artists to contribute to the well-being and health of our daily lives.<sup>39</sup>

—John Hanhardt

Wise spent most of 1971 planning and setting up his not-for-profit organization Intermix, which he soon renamed Electronic Arts Intermix (EAI). His initial motive was to channel funds to individual artists. Several artists' collectives had incorporated as non-profits in order to be eligible for grants from NYSCA, which established a media program that year. According to Frank Gillette, during the brief period Wise occupied the gallery space after it had closed, the group Perception was formed. The original name and idea were conceived by Siegel, who soon after the group's inception left for India, and he had little connection thereafter. The other founding member was Gillette, and Steina and Woody Vasulka soon joined. Perception defined itself as "a group which

conducts research into methods and equipment through which to make more effective presentation and communication of information by video."<sup>40</sup> Wise hoped to obtain money for these artists and help them to produce work.

Then Wise moved his company to 2 W. 13th St. The original board members were Wise, his wife Barbara, and Jerald Ordovery, the Wises' attorney. After incorporation, Intermix applied to NYSCA and received funds for Perception; the Eighth Avant-Garde Festival, directed by Charlotte Moorman; and for Open Circuits, a conference which took place in 1974 at the Museum of Modern Art. All together Intermix received \$35,000 from NYSCA that first year, and its operating budget was around \$42,000. Connor, then media program director at NYSCA, explains "There were four groups applying to NYSCA at the time who were in intense competition: Raindance, Global Village, Videofreex, and People's Video Theater, and then there was Howard. Of course, it was a great relief to talk to Howard, because he seemed so benevolent and unselfish in comparison."<sup>41</sup>

Perception initially received funds for equipment, to conduct programs at a space called the Electronic Kitchen at Mercer Arts Center (later, the Kitchen) established by the

Vasulkas and Andres Mannik, and to fund individual work, primarily that of Gillette and Siegel. As the Vasulkas became more involved in their own work and the Kitchen,<sup>42</sup> other artists in Perception—which soon consisted of Gillette, Siegel (peripherally), Juan Downey, Andy Mann, Ira Schneider, and Beryl Korot—pushed to get editing equipment in 1972. As Wise tells the story:

We got a grant from NYSCA for a deck and a little editing set up in our office. It didn't work out very well because they were in and out at all hours of the night, and artists are not particularly known for their care of an environment, particularly an office where you have to keep a little order. Andy Mann, who knew a lot about the technology, was willing to keep the equipment in his apartment, but then he was interrupted at all hours of the night. That's when they came to me and said, "How about getting us an editing facility? We were notified that we had to move [in 1973], and we came to 84 Fifth Ave. and designed the facility so that it can be used at night, because you can have access to the editing facility without going through the office."<sup>43</sup>

The Avant-Garde Festival was the other major project funded by EAI in the early 1970s. The festivals, begun in 1963 by Charlotte Moorman and several other avant-garde composers, were unconventional gatherings of artists involved in performance, intermedia, dance, music, and sculpture. Each year the event grew in size and notoriety. Moorman supported the festivals with artists' donations of time and materials and contributions from businesses. She recalls meeting Wise for the first time in the late '60s when he and Barbara traveled to Rhode Island to see her and Paik perform. She describes Wise as a father figure immensely supportive of her work. Wise was impressed by Moorman's ability to surmount all obstacles in producing her events, and he began helping her with the festivals in 1970: getting grants, helping with management, providing legal advice as well as the services of his lawyer, going to meetings with her, and lending his influence. He also helped to bring video into the festival. The 1971 festival was held at the 69th Regiment Infantry Armory, and included premieres of the Paik/Abe and Siegel synthesizers, *Video Ferris Wheel*, by Shirley Clarke, *Video Kinetic Environment*, by the Vasulkas, and videotapes by Douglas Davis, Ken Dominick, Ralph Hocking, Tambellini, and the Videofreex. In 1972, the festival was held aboard the Alexander Hamilton Hudson Riverboat at South Street Seaport, and included an even longer list of video artists, including Downey, Gillette, Mann, and Shigeo Kubota.

Wise supported and helped to manage the Avant-Garde Festivals until 1977, when he decided that Moorman should incorporate on her own. Speaking about their collaboration she says,

Mr. Wise has never stopped helping me. For me to make a list of all of



the performances that he has made possible is basically the same as my biography. Somewhere, he has done something for almost every performance, and I have done hundreds of performances. He is always such an elegant gentleman and his help isn't always financial; many times it would be an influential person we needed to reach.

The 1974 Festival—held at Shea Stadium with a 12-hour video program displayed on the new Advent color video projector—was dedicated to Howard Wise.

In 1973 EAI published a brochure called *At the Leading Edge of Art* which described the video community, possible directions for the medium, and activities of the organization. Outlining the potential of distribution systems such as cable television and cassette distribution as well as the problems of artists' access to equipment and to the broadcast networks, the booklet appears foresighted and a marker on the timeline of the gradual exploration and establishment of new outlets. Indeed, many of these issues remain current. When this publication appeared, EAI was supporting Perception, Vasulka Video, the Kitchen, the Avant-Garde Festival, the Open Circuits conference, and the Midnight Opera Company (an opera troupe based at the Kitchen which used video extensively as a stage device). Soon after, most of these projects

Electronic Arts Intermix but has spoken out and fought for the rights of video artists when he felt they were being taken advantage of by others. His energy, commitment and passion have been an important factor in the development of video art.<sup>45</sup>

—Ed Emshwiller

Entities like Howard Wise's Electronic Arts Intermix have to carry the weight as lonely outposts of support. There should be many, many more places like that in New York City. There are very few places where artists can go to edit tape at a price they can afford, but at EAI there is also a good, creative ambience. Electronic Arts Intermix is video. Howard's contribution has been incalculable.

—Willoughby Sharp

When EAI published its first catalogue in 1975, it listed more than 100 videotapes by video artists: Davis, Downey, Emshwiller, Gillette, Kubota, Mann, Paik, Schneider, Siegel, Stan VanDerBeek, the Vasulkas, Bill Viola, the Ant Farm and TVTV collectives, as well as work produced for KQED, WGBH, and WNET. The collection has since grown to include over 350 videotapes in active distribution, with a larger collection of early work available for screening (works in outdated formats and early tapes which, for various reasons, are



Howard Wise introducing Charlotte Moorman at the Paik/Moorman performances for the Nam June Paik exhibition at the Whitney Museum of American Art in 1982. Photograph by Catherine Skopic.

became autonomous, and EAI changed from an organization which managed and supported separate activities to one consisting of two central functions: an editing facility and a distribution service.

By 1973 the video community in New York City had expanded. Organizations such as Downtown Community Television (DCTV) and the Television Laboratory at WNET-TV had sprung up. The Whitney Museum began to include video in its Biennial exhibition, and since 1972 Castelli-Sonnabend Videotapes and Films represented the distribution arm of the gallery. At the same time, many of the artists in Perception who had been using the editing facility at EAI began to pressure Wise to find a means of distributing work, and EAI received funding from the NEA to conduct a feasibility study and establish a pilot distribution operation. Deciding that the only way to find out if distribution was feasible was to try it, Wise initiated the Artists Videotape Distribution Service in 1973.

In 1974 the editing equipment from Perception, which by then had disbanded, was transferred to EAI's Editing/Post-Production Facility. Editing there was then done on a hands-on basis, with artists paying an hourly rate to use the equipment available around the clock. This system was later upgraded with a grant from the Rockefeller Foundation in 1978. Artists now pay \$25.00 per hour to edit, assisted by a video technician,<sup>44</sup> on a system which includes 1/2 and 3/4 inch equipment and a time-base corrector; EAI's editing facility has subsequently been copied by many other post-production houses. While it is still a vital part of the organization, its importance has diminished somewhat as the Distribution Service has gained prominence.

EAI's circulating video collection is now the most comprehensive in the U.S. Few organizations have leapt on the distribution bandwagon, preferring instead to concentrate on post-production. Castelli-Sonnabend distributes a number of artists' tapes (including work by ex-EAIs Gillette and Downey), but the gallery tends to represent a specific kind of work—art-world oriented, by artists who also work in other media. Very recently organizations like the Kitchen, the Museum of Modern Art, and the Whitney Museum (through the American Federation for the Arts) have tentatively begun to distribute tapes, and, outside of New York, Video Data Bank in Chicago, University Community Video in Minneapolis, and the Media Project in Portland, Ore. rent and sell tapes. The collection at EAI, however, remains the most important group of tapes.

no longer in distribution). While the distribution service has steadily expanded, in the past five, and especially the past two years, rentals have increased significantly, according to Lori Zippay, EAI's administrator. Artists are contracted by EAI on a non-exclusive basis and receive 50% of rental and sales fees, 60% in the case of sales for cable or broadcast.<sup>46</sup> Zippay notes that approximately one third of EAI's business is with foreign markets (EAI has representatives in Paris, Berlin, and Tokyo), and that recently many universities have added video to their curricula. As the audience for video widens, EAI increasingly assumes the role of an educational institution, providing historical and descriptive information along with the tapes.

The collection at EAI in its diversity and range, is also very much the product of Wise's vision and taste. It has expanded far beyond the initial core artists, adding tapes by Barbara Buckner, Skip Blumberg, Peter D'Agostino, DCTV, Kit Fitzgerald, Shalom Gorewitz, Gary Hill, John Sanborn, Dan Sandin, Edin Vélez, and others. Their videotape catalogue also reveals diversity; a history of broadcasting, a portrait of activist Helen Caldicott, a documentary on Agent Orange, an introduction to Haitian art, and a tape on the Pritikin diet hint at a rather eclectic method, not unlike Moorman's democratic selection of artists participating in the Avant-Garde Festivals. One with the unmistakable stamp of Howard Wise.

Wise established Electronic Arts Intermix as an organization to serve video artists, and to that end he has created a paradigm for media arts organizations. Beyond EAI's role as one of the first media groups, it is also very much a personal venture. While EAI is now financially viable, receiving regular funds from NYSCA and NEA, with an operating budget of about \$250,000, Wise has never taken a salary. Wise also continues to quietly fund other organizations such as MIT's Center for Advanced Visual Studies, events such as the Whitney Museum's Paik retrospective, and artists' projects which could not find other patrons.

Wise has still not lost interest in video, although he does acknowledge that it has become less novel and somewhat less political than at the onset. As a humanist and politically conscious person, Wise is now concentrating on an issue which is of wider concern and potentially more devastating than the future of video art—the threat of nuclear war. Recently he wrote,

I propose that we urge and encourage the Media Artists to dedicate their attention, their talents and their sensitivities to promote, through their art, an understanding of the problem posed by the presence of 50,000 nuclear warheads in our midst, poised and set to go (whether by accident or design, it makes no difference) and to avoid if it is humanly possible the final Holocaust which will consume us all, friends and enemies alike.<sup>47</sup>

In addition to encouraging artists to take a political stand on this issue and express it in their art, EAI now circulates several tapes which deal with nuclear war: Erik Barnouw's *Hiroshima—Nagasaki, August 1945: The Case of the A-Bomb Footage* and *Hiroshima: The People's Legacy*, produced by Japan Broadcasting Association (NHK).

Given Wise's political interest, his history as a supporter of the arts, and his awareness of new technologies and the political nature of art, it is not surprising that he has wholeheartedly directed his energy to an important global movement. His is a persuasive concept of the role of artists in society and the responsibility of artists to technology and social change, which many may not share but might consider.

## NOTES

1. *TV as a Creative Medium* (exhibition brochure), (New York: Howard Wise Gallery, 1969), n.p.
2. I would like to express my thanks to the many people who contributed information to this article.
3. Unless otherwise noted, all quotes from Frank Gillette are from an interview with the author, Nov. 11, 1983.
4. Davidson Gigliotti, "Video Art in the Sixties," *Abstract Painting—1960-69* (exhibition catalogue), Long Island City, N.Y.: Institute for Art and Urban Resources Inc., 1983), n.p.
5. Howard Wise, "Kinetic Light Art," *American Home* (October 1969), p. 32.
6. Unless otherwise noted, quotes from Davidson Gigliotti are from an interview with the author, Aug. 7, 1983.
7. Unless otherwise noted, quotes from Willoughby Sharp are from an interview with the author, Aug. 25, 1983.
8. All quotes from Nam June Paik are from an interview with the author, Aug. 5, 1983.
9. Wise earned a B.A. in history and international law at Cambridge University.
10. Unless otherwise noted, quotes from Howard Wise are from interviews with the author, October and November 1982.
11. The space is now occupied by the Allan Frumkin Gallery.
12. The Wise Gallery exhibition had, in fact, been scheduled for 1958, but several Agams disappeared from Wise's basement in Cleveland while he was away for the summer. The Stedelijk exhibition traveled to the Moderna Museet in Stockholm, where Hultén was director.
13. Wise, *American Home*, p. 28.
14. Otto Piene, who still continues his working relationship with Wise, recalls that prior to the exhibit he received a call in Düsseldorf from Wise after MacAgy had seen Group Zero's work: "It was a sensational event in 1964 for a New York art dealer to make a transatlantic call to an artist in Germany. Howard was elated on the phone, talking about the exhibition we would have at the gallery. He had just become a father again [Wise's daughter Juliet was born that year], and he was blossoming through the telephone."
15. All quotes from Otto Piene are from an interview with the author, Feb. 8, 1984.
16. Willoughby Sharp, *Uecker* (New York: Kineticism Press and Howard Wise Gallery, 1966), n.p.
17. Le Parc actually won in the category of painting, since his work fit neatly in none of the categories, and that year the Biennial judges recommended that categories be abolished altogether.
18. David L. Shirey, "Art is Light," *Newsweek*, Feb. 20, 1967, p. 101.
19. Paik had previously shown *Electronic Blues*, the first video piece exhibited at the gallery, in "Lights in Orbit."
20. Hilton Kramer, *New York Times*, Dec. 16, 1967.
21. The Forbes collection includes artists Jackie Cassen and Rudi Stern, Richard Hogle, Julio Le Parc, Otto Piene, Earl Reiback, and Thomas Tadlock. See: *American Home*, October 1969.
22. All quotes from David Bermant are from an interview with the author, Sept. 16, 1983.
23. Although this piece was published without a byline, Shamberg and others concur that he reviewed the show for *Time*.
24. All quotes from Eric Siegel are from an interview with the author, September 1983. See also "Notes Toward a History of Image-Processed Video," by Lucinda Furlong, *Afterimage*, Vol. 11, Nos. 1&2 (Summer 1983), p. 35.
25. Les Levine produced two installations, *Iris* (1968) and *Contact: A Cybernetic Sculpture* (1969), which were important predecessors to *Wipe Cycle*, although less complex. In *Iris*, six monitors in a grid show imagery of viewers in close-up, mid-range, and wide angle; in *Contact*, the concept of *Iris* is extended with similar imagery on 18 monitors (nine on either side), with images switching from screen to screen.
26. *TV as a Creative Medium*, op. cit.
27. Richard Kostelanetz, "Artistic Machines," *Chicago Review*, Vol. 23, No. 1 (1971), p. 124.
28. Moorman was convicted of indecent exposure for performing semi-nude. Paik, as the composer, was acquitted.
29. All quotes from Charlotte Moorman are from an interview with the author, Sept. 17, 1983.
30. *TV as a Creative Medium*, op. cit.
31. *Ibid.*
32. Jud Yalkut, "TV as a Creative Medium," *Arts Magazine* (September-October 1969), p. 22.
33. Siegel added "in color" to the title of the tape because color videotapes were unusual at the time.
34. Yalkut, p. 20.
35. Barbara Rose, "Television as Art, 'inevitable,'" *Vogue* (Aug. 15, 1969), p. 36.
36. Additional artists in "Vision & Television" were Ted Kraynik, Les Levine, Eugene Grayson Mattingly, John Reilly, Rudi Stern, Jud Yalkut, USCO/Intermedia, and the Videofreeex.
37. Steina Vasulka quoted in Lucinda Furlong, "Notes Toward a History of Image-Processed Video: Steina and Woody Vasulka," *Afterimage*, Vol. 11, No. 5 (December 1983), p. 13.
38. John S. Margolies, "TV—The Next Medium," *Art in America*, Vol. 57, No. 5 (September/October 1969), p. 48.
39. Willoughby Sharp, "Luminism and Kineticism," *Minimal Art: A Critical Anthology*, Gregory Battcock, ed. (New York: E.P. Dutton, 1968), p. 358.
40. From an interview with the author, Aug. 15, 1983.
41. From a letter to the author, November 1983.
42. *At the Leading Edge of Art* (New York: Electronic Arts Intermix, 1973), p. 8.
43. All quotes from Russell Connor are from an interview with the author, Sept. 20, 1983.
44. The Vasulkas received funding through EAI until 1973, when they moved to Buffalo and the Kitchen was incorporated separately.
45. From an unpublished interview with Deidre Boyle, 1981.
46. Non-profit institutions pay \$35.00/hour, and profit organizations pay \$50.00/hour.
47. From a letter to the author, Aug. 4, 1983.
48. EAI videotapes rent for an average of \$50.00 for a 30-minute tape, and \$75.00 for a 60-minute tape.
49. Howard Wise, "If We Can Reach the Year 2000," *The Media Arts in Transition*, Bill Horrigan, ed. (Minneapolis: Walker Art Center, 1983), p. 17.